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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,726	07/12/2001	Adalbert W. Goraczko	14840-IUS MJS/SC/sm	9521
20988	7590	10/20/2004	EXAMINER	
OGILVY RENAULT 1981 MCGILL COLLEGE AVENUE SUITE 1600 MONTREAL, QC H3A2Y3 CANADA			TOOMER, CEPHIA D	
			ART UNIT	PAPER NUMBER
			1714	
DATE MAILED: 10/20/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/902,726

Applicant(s)

GORACZKO, ADALBERT W.

Examiner

Cephia D. Toomer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-19 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

### DETAILED ACTION

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 and 7-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merriam (U.S. 5,322,530).

Merriam teaches a process for producing clean burning fuel from low-rank coal. Merriam takes raw coal grinds it and feeds it to a conventional fluidized bed dryer wherein the hot gas used for the dryer is composed of a mixture of recycled drying gas and new flue gas (see col. 5, lines 43-53). The flow rate is such that it is adequate to operate the bed and heat the bed up to 350 °F. The coal leaving the dryer is bone-dry as it enters a pyrolyzer. The dryer overhead stream contains coal fines, which are removed by a cyclone. The fines are consolidated and recycled into the partly processed coal stream leaving the pyrolyzer. The overhead gas from the fines removal system is partly recycled back to the dryer and partly passed through a sulfur removal unit (withdrawing unwanted components) (see col. 5, lines 56 through col. 6, lines 1-4).

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The pyrolyzer is a conventional fluidized bed where the solid material feed comes from the dryer discharge. The coal is pyrolyzed and passed to the cooler, which is operated with a feed largely from the discharge of the pyrolyzer and a fluidized gas coming from the overhead stream of the pyrolyzer. In order to adequately cool the coal, water is sprayed (electrolyzer) over the bed and an ecological coal product is formed. Merriam flows the by product gas through a blower (turbine) into a burner to produce energy (see col. 6, lines 41-65).

Merriam teaches the limitation of the claims other than the differences that are discussed below.

With respect to claims 1-4, Merriam teaches the limitation of the claim other than that he stores the combustible by-products. However, no unobviousness is seen in this difference because Merriam teaches that the flow of the combustible by-product gas is such that it is adequate to operate the fluidized bed and heat the bed up to 350 °F. This teaching suggests that the combustible by-products are stored in the system and metered out when the fluidized bed requires more energy. By monitoring the fluidized bed, Merriam recognizes when more energy is required to operate the bed and regulates the flow of the gas produced by-products.

With respect to claim 9, Merriam does not teach that hot carbonate is briquetted from the pyrolyzed material of "power-coal" and baking-coal. However, it would be reasonable to expect such a product since these are low rank coals and Merriam uses low rank coals. Thus, the skilled artisan would expect that hot carbonate would be the pyrolyzed material.

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With respect to claim 11, it is the examiners position that the pipes leading from dryer, pyrolyzed and cooler, stores the gas until is it need to run the process. Applicant has placed no time limit on the storage time; therefore, the gas being in the pipes as little as 1-10 seconds would be considered as storing the gas by products. The rotary valves are considered to meet the limitation of the control system because they allow the fines from the cyclone to mix with the recycled dryer gas and to return to the dryer as an additional heating source.

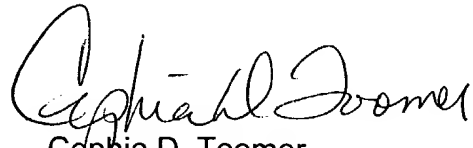
3. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art fails to teach or suggest that the combustible by-products are stored under pressure into a storage unit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cephia D. Toomer  
Primary Examiner  
Art Unit 1714

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